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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,298	12/01/2003	Georg Michelitsch	450117-04826	6105

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EXAMINER

TERMANINI, SAMIR

ART UNIT	PAPER NUMBER
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2178

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/726,298	Applicant(s) MICHELITSCH ET AL.	
	Examiner Samir Termanini	Art Unit 2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/1/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the following communications: Application filed on 12/1/2003.
2. Claims 1-14 are pending in this case. Claim 1 is in independent form.
3. The information disclosure statement (IDS) filed on December 1, 2003 has been acknowledged and considered by the examiner. The Initial copy of form PTO-1449 is included in this office action.
4. Receipt is acknowledged of papers submitted on 12/1/2003 under 35 U.S.C. § 119 (a)-(d), which papers have been placed of record in the file.

CLAIM REJECTIONS - 35 U.S.C. §112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 1, 3, 5-8, 11, and 13 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, the terms "convenient" and "reliable" in claim 1 are relative terms which render the claim indefinite. The term terms "convenient" and "reliable" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Furthermore, the scope of claim language cannot depend solely on the subjective opinion of an individual practicing the invention. During patent

examination, the claims are given the broadest reasonable interpretation consistent with the specification. *In re Morris*, 127 F.3d 1048, 44 USPQ2d 1023 (Fed. Cir. 1997); *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005). All Prior Art rejections in this Office Action are applied as best understood in light of the rejection under 35 U.S.C. §112.

With respect to claims 1, 3, and 5-8, it is not clear if the forward slash '/' in "and/or" is intended to conjunctively, disjunctively, or inclusively concatenate those elements immediately before and after it. More specifically, it is unknown which of the limitations are included in the claimed invention: (1) those before and after; (2) those before or after or both; or (3) those both before and after, or only after. During patent examination, the claims are given the broadest reasonable interpretation consistent with the specification. *In re Morris*, 127 F.3d 1048, 44 USPQ2d 1023 (Fed. Cir. 1997); *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005). All Prior Art rejections in this Office Action are applied as best understood in light of the rejection under 35 U.S.C. §112.

With respect to claims 11 and 13, the phrase "or the like" renders the claim(s) indefinite because the claims include elements not actually disclosed (i.e. those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP §2173.05(d). During patent examination, the claims are given the broadest reasonable interpretation consistent with the specification. *In re Morris*, 127 F.3d 1048, 44 USPQ2d 1023 (Fed. Cir. 1997); See also *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005). All Prior Art rejections in this Office Action are applied as best understood in light of the rejection under 35 U.S.C. §112.

CLAIM REJECTIONS - 35 U.S.C. §101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 11 and 13 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter, and further raises questions as to whether the claims are directed to an abstract idea. More specifically, the claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101. They are clearly not a series of steps or acts, to be a process, nor are they a combination of chemical compounds to be a composition of matter. Claims 11 and 13 are computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs because the “computer program” limitation recited, in claims 11 and 13, is not limited to those that are “computer-readable” (e.g. the claimed “storage medium” could be a piece of paper) and likewise does not define any structural and functional interrelationship between the computer program and other claimed elements of a computer which permit the computer program’s functionality to be realized. Therefore, claims 11 and 13, being directed toward computer listings *per se*, fail to fall within a statutory category.

9. For the purposes of examination, claims 11 and 13 are being examined as if they were directed toward subject matter claimed as embodied on a computer-readable medium.

CLAIM REJECTIONS - 35 U.S.C. §102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

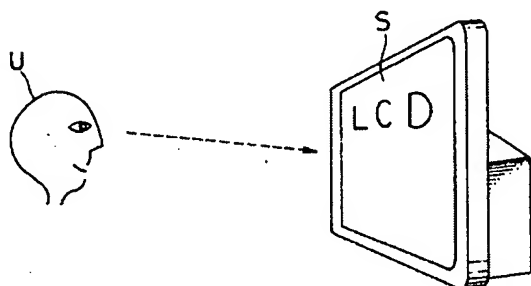
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-6 and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by *Kuga* (U.S. Patent No. 5,686,940 A).

As to independent claim 1, *Kuga* teaches a method for operating a display device, in particular within a graphical user interface, comprising the steps of: generating and/or receiving user position information of a possible user in relation to an involved display unit of said display device ("...the variation in distance between the LCD 1 and the upper half of the user's body is detected. Thus, by comparing an output of the distance sensor 2 with the predetermined value by the comparator 3, whether the upper half of the user's body is near the LCD 1 or far from the LCD 1 is detected. " col. 3, lines 24-30), changing and displaying mode for displaying display information on said display unit in relation to the position of the user with respect to the display unit. ("The changeover between the enlargement and the reduction of an image and between the scrolling and the stopping of a text and between the moving display and the stationary display of a moving image is made according to the detected distance." col. 1, lines 59-63).

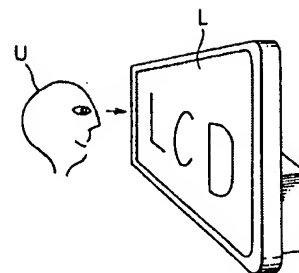
As illustrated by *Kuga* in Figs. 2-3:

FIG. 2



For example, in Fig. 2 the distance between a user U and the LCD 1 is long, so that a reduced image S is displayed on the LCD 1 (col. 3, lines 37-45).

FIG. 3



For example, in Fig. 3 the distance between the user U and the LCD 1 is short, so that an enlarged image L is displayed on LCD 1 (col. 3, lines 37-45).

As to dependent claim 2, *Kuga* further teaches the user position information is designed to describe a distance of the possible user ("the distance detected by the distance sensor is the distance between the upper half of the viewer's body and the display panel. Thereby, the change of display is made by a very natural movement of the viewer that the upper half of the body is moved forward or backward." col. 1, line 65 to col. 2, line 3).

As to dependent claim 3, *Kuga* further teaches the step of receiving said user position information involves a process of measuring the distance between the possible user and said display unit ("...comparing an output of the distance sensor 2 with the predetermined value by the comparator 3, whether the upper half of the user's body is near the LCD 1 or far from the LCD 1 is detected." col. 3, lines 25-29).

As to dependent claim 4, *Kuga* further teaches that a distance or a position sensing means is used for measuring the distance between the possible user and the display unit ("a distance sensor which detects the distance between the user and the LCD 1" col. 2, lines 32-34).

As to independent claim 5, *Kuga* teaches an ultrasonic sensor means ("While in this embodiment, the distance sensor 2 comprising the CCD is placed on the LCD 1 to detect the distance between the user and the LCD 1, a position sensing device (PSD) or an ultrasonic sensor may be used as the distance sensor." col. 3, lines 52-56) or with an image processing means being used as position sensing means ("The distance sensor 2 comprises a charge coupled device (CCD) and is placed on the LCD 1. The distance sensor 2 detects light from the upper half of the user's body by the CCD, and outputs, as an analog voltage, the ratio of the number of pixels which detect light including a skin-color component to the total number of pixels." col. 2, lines 48-53).

As to dependent claim 6, *Kuga* further teaches that changing said display mode includes the size of the image ("In FIG. 2, the distance between a user U and the LCD 1 is long, so that a reduced image S is displayed on the LCD 1. In FIG. 3, the distance between the user U and the LCD 1 is short, so that an enlarged image L is displayed on LCD 1." col. 3, lines 37-45).

As to dependent claims 9, *Kuga* further teaches a method for operating a man-machine interface unit and in particular a graphical user interface unit comprising a method for operating a display device ("...by the user by operating the image inputter 9..." col. 3, lines 6-7).

As to independent claim 10, *Kuga* teaches an apparatus, in particular graphical user interface unit or man-machine interface unit, which is adapted to realize a method for operating a display device according to claim 1.

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As to dependent claims 11 and 12, these claims differ from claim 1, only in that they are directed to products defined by the processes of claim 1. Accordingly, claims 11 and 12 are rejected for the same reasons set forth in the treatment of claim 1, above.

As to dependent claims 13 and 14, these claims differ from claim 9, only in that they are directed to products defined by the process of claim 9. Accordingly, claims 13-14 are rejected for the same reasons set forth in the treatment of claim 9.

CLAIM REJECTIONS - 35 U.S.C. §103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

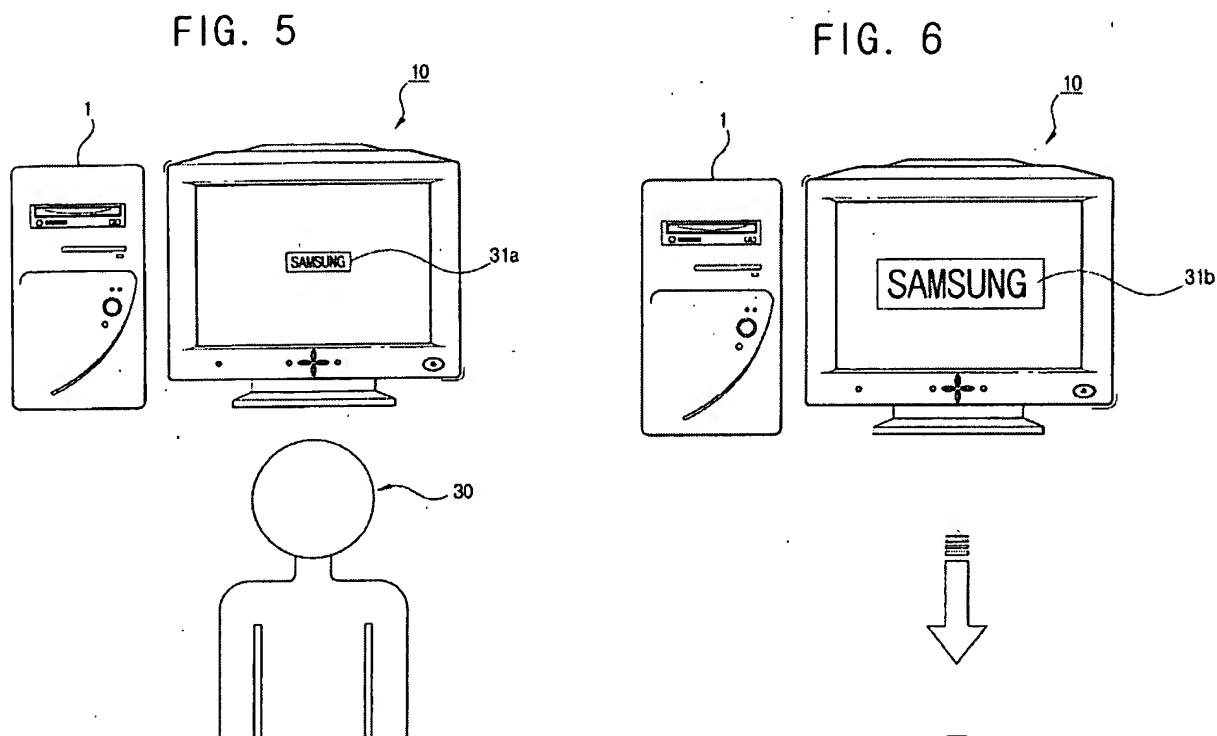
13. Claims 7 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over *Kuga* (U.S. Patent No. 5,686,940 A) in view of *Lee* (U.S. Pre-Grant Pub. 2003/0234799 A1).

As to dependent claims 7-8, *Kuga* teach the limitations of claim 1, detailed above. However, *Kuga* does not clearly teach that with respect to text information, the font size is continuously increased when increasing the distance between a user and a display and that the font size is continuously decreased when decreasing the distance between a user and a display. *Lee* is cited for teaching that when increasing and decreasing the distance between a possible user and a display, with respect to text information, the font size is increased and decreased respectively:

[A]djusting a size of an image when the distance between the display apparatus 10 and a user is changed. For example, when the distance between the display apparatus 10 and a

user is changed from 0.5 m to 2 m, the image size adjusting part 5 enlarges the size of the image by 200% on the basis of the image displaying ratio data stored in the image displaying ratio data storage part 3. When the distance is changed from 2 m to 1 m, the image size adjusting part 5 reduces the size of the image by 100%. Herein, the software program employed as the image size adjusting part 5 provides an image displaying ratio setting window 20...as a graphic user interface (GUI), thereby allowing a user to set up the image displaying ratio personally in correspondence to the distance between the display apparatus 10 and a user. That is, the image displaying ratio setting window 20 is served as the image displaying ratio setting part 6. (*Lee* para. [0030]).

Lee further teaches the changes to occur in a continuous manner ("automatically adjusted according to a change of a distance between the display apparatus and a user." para. [0008]) (emphasis added). As illustrated by *Lee* in Figs. 5-6:



FIGS. 5 and 6 illustrate the size of an image according to the distance between the display apparatus 10 and a user. As shown therein, if the distance between the display apparatus 10 and a user 30 becomes more distant, the size of an image displayed on the display apparatus 10 is enlarged (refer to a change from 31a of FIG. 5 to 31b of FIG. 6), so that the image can be easily seen by a user. In contrast, if a user 30 moves closer to the display apparatus 10, the size of the image displayed on the display apparatus 10 is reduced. (*Lee*, para. [0038]).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the method (according to the teachings of *Lee*) of increasing the font size when the user was distant from the display, and conversely, decreasing the font size when the user was near the display with *Kuga* because *Kuga*: (1) *Kuga* and *Lee* are in the same field of endeavor of adjusting an image size of a display apparatus; (2) *Kuga* and *Lee* are further directed to the same problem of adjusting the size of an image automatically according to a change of a distance between a display apparatus and a user; and (3) The teachings in *Kuga* provide a motivation for using the method taught by *Lee* (i.e. the font size is continuously increased when increasing the distance between a user and a display and that the font size is continuously decreased when decreasing the distance between a user and a display) because *Kuga* expressly suggests that the manual process of changing displays is cumbersome and inefficient especially for handicapped people (including those with visual impairments),

The change of displays is usually made by the user by operating an input means[.] However, when the display modes are changed by such operations, delay is readily caused in the man to machine interface, and the operations themselves are complicated. In addition, the operations are sometimes very difficult for physically handicapped people. (*Kuga*, col. 1, lines 31-46).

CONCLUSION

14. Although not relied upon, the following prior art is made of record because it considered pertinent to applicant's disclosure:

- [1] *Kabushiki* (US 5912721 A) for teaching a gaze-point detecting section for estimating the user's gaze point and a display change section for changing the display method of a display portion of information being selected by the user thereby enabling easy and rapid selection of information by use of the user's gaze-point information.

- [2] *Nasserbakht* (US Pat. No. 6,072,443 A) for teaching a display working in conjunction with a user's eyes where the display can modify the image to enhance viewing by the user.
- [3] *Stern et al.* (US 2002/0047828 A1) for teaching a system and method for helping ensure that a user of a computer is set up to optimally view the computer monitor including the monitoring of the distance of a user from the computer monitor during use of the computer.
- [4] *Grover* (US 2003/0122777 A1) for teaching a computer system including a sensor to measure the approximate distance between the user and the system. Based on this distance the image on a display screen of the computer system is modified to enhance visibility.
- [5] *Williams* (US 2003/0210258 A1) for teaching altering a displayed image presented to a user on a viewing device using the proximity of the user to the viewing device to determine how the displayed image is to be presented. The viewing device includes a plurality of proximity sensors that are used to determine the location of a user to the viewing device. As the user moves his or her position relative to the viewing device, the proximity sensors detect the change in the user position. These changes in detected position are used to alter the image being displayed upon the viewing device.

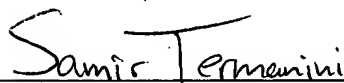
15. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini whose telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 4 P.M., Monday through Friday (excluding alternating Fridays).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

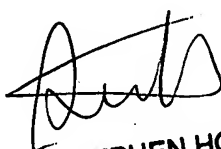
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information

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about the PAIR system, *see* <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Samir Termanini
Patent Examiner
Art Unit 2178


STEPHEN HONG
SUPERVISORY PATENT EXAMINER